BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

AU9341853

(12) PATENT ABSTRACT (11) Document No. AU-A-41853/93
(19) AUSTRALIAN PATENT OFFICE

(54) Title
SYNTHETIC DETERGENT TOTAL BODY CARE PRODUCT

(51)[5] International Patent Classification(s)
A61K 007/50 A61K 007/08 C11D 001/94 C11D 003/37

(21) Application No. : **41853/93** (22) Application Date : **08.07.93**

(30) Priority Data

(31) Number	(32) Date	(33) Country
918106	**24.07.92**	**US UNITED STATES OF AMERICA**

(43) Publication Date : **27.01.94**

(71) Applicant(s)
COLGATE-PALMOLIVE COMPANY

(72) Inventor(s)
AMRIT PATEL; CLARENCE R. ROBBINS; PETER R. HILLIARD JR.

(74) Attorney or Agent
F B RICE & CO , 28A Montague Street, BALMAIN NSW 2041

(57) Claim

1. A solid synthetic detergent composition for cleaning and conditioning hair and skin to provide softer, smoother hair and skin comprising

(A) a major amount of a mixture of (1) a high-foaming anionic detergent selected from the group consisting of higher alkyl sulfates, higher alkyl sulfonates and higher alkyl mononuclear aromatic sulfonates and (2) an amphoteric detergent; and

(B) a minor amount of less than about 10% by weight, based on the total composition, of a water-insoluble silicone having a viscosity of from about 1,000 to about 120,000 cP;

wherein the molar ratio of amphoteric detergent to high-foaming anionic detergent is from about 2:1 to about 1:2.

The Commissioner of Patents
PO Box 200
WODEN ACT 2606

F B RICE & CO
SYDNEY NSW
Speed Dial 511

AUSTRALIA
Patents Act 1990

PATENT REQUEST: STANDARD PATENT

We, COLGATE-PALMOLIVE COMPANY, being the person(s) identified below as the Applicant, request the grant of a standard patent to the person identified below as the Nominated Person, for an invention described in the accompanying complete specification.

Full application details follow.

Applicant:	COLGATE-PALMOLIVE COMPANY a Delaware Corporation
Address:	300 Park Avenue New York New York 10022 United States of America
Nominated Person:	COLGATE-PALMOLIVE COMPANY a Delaware Corporation
Address:	300 Park Avenue New York New York 10022 United States of America
Invention Title:	"Synthetic detergent total body care product"
Name(s) of Actual Inventor(s):	Amrit PATEL; Clarence R.ROBBINS; Peter R.HILLIARD Jr.
Address for service is:	F.B. RICE & CO., 28A Montague St, Balmain N.S.W. 2041
Attorney Code:	RI

BASIC CONVENTION APPLICATION(S) DETAILS

Application No	Country	Country Code	Date of Application
7/918106	U S A	US	24 July 1992

We are not an eligible person described in Section 33 - 36 of the Act.

Dated this 8 day of July 1993

COLGATE-PALMOLIVE COMPANY

By: _____
Registered Patent Attorney

S 038827 080793

PW/WAW3/60828

AUSTRALIA
Patents Act 1990

P/00/008
Section 29(1)
Regulation 3.1(2)

NOTICE OF ENTITLEMENT

(To be filed before acceptance)

I, Robert C.Sullivan

being authorised by Colgate-Palmolive Company

of 300 Park Avenue, New York, New York, United States of America the applicant in respect of an application for a patent

for an invention entitled Synthetic detergent total body care product

filed under Australian Application No. _____, state the following:-

Part 1 - Must be completed for all applications.

The person nominated for the grant of the patent has, for the following reasons, gained entitlement from the actual inventor(s):

Colgate-Palmolive Company is the assignee of the invention from the actual inventor(s).

Part 2 - Must be completed if the application is a Convention Application.

The person nominated for the grant of the patent is entitled to rely on the basic application(s) listed on the patent request form by reason on the following:

Colgate-Palmolive Company is the assignee of the basic application from the said actual inventor(s)

The basic application(~~s~~) listed on the request form is (~~are~~) the first application(~~s~~) made in a Convention country in respect of the invention.

Colgate-Palmolive Company

Signed: _____ Date: _____
Robert C. Sullivan
Status: Vice President and Chief Patent Counsel

F.B. RICE & CO. PATENT ATTORNEYS

AUSTRALIA

Patents Act 1990

COLGATE-PALMOLIVE COMPANY

ORIGINAL
COMPLETE SPECIFICATION
STANDARD PATENT

Invention Title:

"Synthetic detergent total body care product"

The following statement is a full description of this invention including the best method of performing it known to us:-

BACKGROUND OF THE INVENTION

Field Of The Invention:

The present invention is directed to a total body care product. More particularly, it is directed to a solid synthetic detergent composition, which may be in the form of a bar, that is mild enough to use on all body parts including facial skin, yet at the same time cleans and conditions both hair and skin.

Description Of The Prior Art

U.S. Patent 3,903,008 discloses a non-irritating conditioning/cleansing bar containing of sodium stearate; polyethylene glycol of a molecular weight within the range of from about 200 to about 800; polyethylene glycol of a molecular weight within the range of from about 800 to about 4,000; propylene glycol; water; a fatty acid dialkanolamide; and a quaternized dihydroimidazole.

U.S. Patent 3,989,647 discloses a quick lathering toilet bar containing an alkane sulfonate of 12 carbon atoms in the alkyl chain or a mixture of alkane sulfonates averaging 12 carbon atoms in the alkyl chain; a super-fatting agent comprising natural or synthetic fatty acids containing 12 carbon atoms or mixtures of said acids averaging 12 carbon atoms; and a binder modifier selected from hydroxyalkanesulfonates, acyl (C_{10}-C_{16}) isethionates, alkylmethyl taurides, hydroxyalkylmethyl taurine, alkyl sulfates, alkyl phosphates, alkyl phosphonates, alkyl sulfo-succinates, mono-alkyl succinates and maleates, alkane disulfonates and alkene sulfonates.

U.S. Patent 3,012,341 discloses an all synthetic detergent shampoo bar containing a polyethyoxylated dialkyl phenol non-ionic detergent; a sodium or potassium higher alkyl sulfate; and the monoethanolamide of stearic acid as binding agent.

U.S. Patent 4,137,191 discloses a low-irritant surfactant composition, adapted for shampoos and other light duty cleansing applications which is obtained by preparing a betaine surfactant having at least one long chain aliphatic radical attached to a positively charged nitrogen atom by reacting, in a non-aqueous liquid medium, a chloroacetic acid salt with a tertiary amine having at least one long chain aliphatic radical attached to the amino nitrogen atom. The non-aqueous liquid medium is a water-miscible, polar, organic liquid having a boiling point of at least 180°C. To the resulting betaine product, while still dispersed in said non-aqueous medium, a substantially equimolar amount of an amine fatty alcohol sulfate is added.

U.S. Patent 4,166,043 discloses a high-foaming detergent composition having low skin irritation properties containing a mixture of polyoxyethylene alkyl ether sulfate salts and a betaine-type amphoteric surface active agent.

U.S. Patent 4,246,131 discloses a low irritant surfactant composition, particularly adapted for shampoos and other light duty cleansing applications, in fluid form. The composition contains a mixture of a betaine surfactant compound having at least one long chain aliphatic radical attached directly to a positively charged nitrogen atom and an anionic surfactant, i.e., alkanolamine

neutralized fatty alcohol sulfates, alkyl ether sulfates containing 1 to 4 ethylene oxide groups, alkyl sulfonates and alkenyl sulfonates. The surfactant mixture is dispersed in a non-aqueous liquid medium based on a water-miscible, polar, organic liquid having a boiling point of at least 180°C.

U.S. Patent 4,452,732 discloses a shampoo composition which includes a quaternary ammonium compound having at least one unsaturated long chain substituent and having an iodine value of from about 10 to about 85; a long chain acyl derivative selected from long chain amides, alkanolamides, esters of glycerine, esters of ethylene glycol, esters of carboxylic acids, esters of thiocarboxylic acids and mixtures thereof; a surfactant selected from higher alkyl betaines and mixtures of higher alkyl betaines and higher alkyl sultaines; and water.

U.S. Patent 4,704,272 discloses a shampoo composition containing a synthetic anionic surfactant or mixtures thereof; a dispersed, insoluble, non-volatile silicone or mixtures thereof; a hair conditioning agent selected from tri-long-chain-alkyl mono-short-chain-alkyl quaternary ammonium salts, tri-long-chain-alkyl amines and mixtures thereof; a suspending agent; and water.

U.S. Patent 4,772,424 discloses a shampoo based on an alkyl sulfate or alkyl sulfonate surfactant; a betaine surfactant, a sarcosinate surfactant and water.

U.S. Patent 4,954,282 discloses a skin cleansing composition based on C_{16}-C_{18}-acyl esters of isethionic acid salts having no more than 25% C_{14} or lower acyl groups; and at least one co-surfactant.

U.S. Patent 4,996,006 discloses a solid shampoo bar composition containing 70 to 90% detergent, preferably sodium lauryl sulfate, in solid needle form; 1 to 10% water; and, optionally, small amounts of various other ingredients such as conditioners, essential oils, perfumes and dyes, and additional binding agents for the needles.

U.S. Patent 5,055,233 discloses a detergent bar suitable for use as a toilet soap produced by mixing an effective amount of a trialkylamine oxide dihydrate in a detergent bar formulation.

U.S. Patent 5,063,044 discloses a hair conditioning composition containing water, a thickener and an organosilicon compound; and a hair shampoo conditioning composition containing water, at least one surfactant, a thickener and an organosilicon compound. In both compositions, the organosilicon compound is a siloxane selected from carboxy functional polysiloxanes, carboxyl-glycol ether functional polysiloxanes and carboxy-glycol ester functional polysiloxanes.

As seen from the above, numerous formulations directed to hair shampoos and conditioners or toilet soaps have been prepared from synthetic detergents. However, a need still exists for the formulation of a synthetic detergent solid product, suitable for bar formulation, which is mild enough to use on all body parts, including facial skin, yet at the same time cleans and conditions both hair and skin.

SUMMARY OF THE INVENTION

The present invention provides a total body care product, in the form of a solid synthetic detergent composition, that is mild enough to be used on facial skin, yet can be used on hair for cleaning and condition. More particularly, the present invention provides a solid synthetic detergent composition for cleaning and conditioning hair and skin to provide softer, smoother hair and skin. The composition includes (A) a major amount of a mixture of (1) a high-foaming anionic detergent selected from higher alkyl sulfates, higher alkyl sulfonates and higher alkyl mono-nuclear aromatic sulfonates and (2) an amphoteric detergent; and (B) a minor amount of more than 0 but less than about 10% by weight, based on the total composition, of a water-insoluble silicone having a viscosity of from about 40,000 to about 120,000 cP; wherein the molar ratio of amphoteric detergent to high-foaming anionic detergent is from about 2:1 to about 1:2.

DETAILED DESCRIPTION OF THE INVENTION

The present invention is based on the discovery that the use of large amounts of amphoteric detergents, such as betaines, sulfobetaines, amine oxides, etc., in conjunction with high-foaming, normally irritating surfactants, such as higher alkyl sulfates, higher alkyl sulfonates and higher alkyl mononuclear aromatic sulfonates, renders the irritating surfactants milder than what are commonly considered to be mild detergents.

The high-foaming, normally irritating anionic detergents suitable for use in the present invention include, for example,

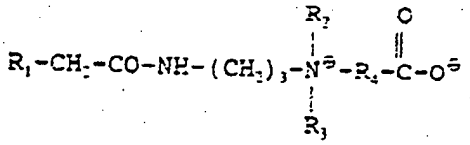
higher alkyl sulfonates and higher alkyl sulfates, i.e., C_4-C_{26}-alkyl sulfates and C_4-C_{26}-alkyl sulfonates, preferably C_{12}-C_{22}-alkyl sulfates and C_{12}-C_{22}-alkyl sulfonates. A preferred high-foaming anionic detergent is sodium lauryl sulfate. The high-foaming, irritating anionic detergents suitable for use in the present invention also include higher alkyl mononuclear aromatic sulfonates, i.e., C_4-C_{26}-alkyl mononuclear aromatic sulfonates, preferably C_{10}-C_{18}-alkyl mononuclear aromatic sulfonates, wherein the alkyl group is a straight or branched chain, such as, for example, the sodium, potassium and ammonium salts of higher alkyl benzene sulfonates, higher alkyl toluene sulfonates and higher alkyl phenol sulfonates.

The amphoteric detergents suitable for use in the present invention include those containing anionic and cationic groups and having a hydrophobic organic group, which is advantageously a higher aliphatic radical, e.g., about 10-20 carbon atoms. Among these, mention may be made, for example, of the N-long chain alkyl amino carboxylic acids (e.g., of the formula RR^2NR^1COOM); N-long chain alkyl imino dicarboxylic acids (e.g., of the formula $RN(R^1COOM)_2$), the N-long chain alkyl betaines (e.g., of the formula $RR^2R^3N^+-R^1COO^-$) and the N-long chain alkyl sulfobetaines (also known as sultaines) (e.g., of the formula $RR^2R^3N^+-R^1SO_3^-$) where R is a long chain alkyl group, e.g., of about 7-20 carbon atoms, preferably 8 to 18 carbon atoms, especially from 10 to 14 carbon atoms, R^1 is a divalent radical joining the amino and carboxylic portions of an amino acid (e.g., an alkylene radical of 1-4 carbon atoms, especially 1-2 carbon atoms), M is hydrogen or a salt-forming

cation, e.g. alkali metal, R^2 is hydrogen or another monovalent substituent (e.g., methyl or other lower alkyl of 1-4 carbon atoms) and R^3 and R^4 are monovalent substituents joined to the nitrogen by carbon-to-nitrogen bonds (e.g., methyl or other lower alkyl substituents). Examples of specific amphoteric detergents include the N-alkyl-beta-amino propionic acids; N-alkyl-beta-imino-dipropionic acids and N-alkyl, N,N-dimethyl glycine. The alkyl group may be, e.g., that derived from coco fatty alcohol, lauryl alcohol, myristyl alcohol (or a lauryl-myristyl mixture), hydrogenated tallow alcohol, cetyl alcohol, stearyl alcohol or blends of such alcohols. The substituted amino propionic and imino dipropionic acids are often supplied in the sodium or other salt forms which may likewise be used in the practice of this invention.

Examples of other amphoteric detergents include the fatty imidazolines such as those made by reacting a long chain fatty acid (e.g., of about 10-20 carbon atoms) with di-ethylene triamine and monohalo carboxylic acids having 2-6 carbon atoms, e.g., 1-coco-5-hydroxyethyl-5-carboxyethyl imidazoline; betaines containing a sulfonic group instead of a carboxylic group, i.e. sultaines; betaines in which the long chain substituent is joined to the carboxylic group without an intervening nitrogen atom, e.g., inner salts of 2-trimethyl amino fatty acids such as 2-trimethylaminolauric acid; and compounds of any of the previously mentioned types in which the nitrogen atom is replaced by phosphorous.

A particularly preferred class of amphoteric detergents are the alkyl bridged amido-betaine detergents having the formula



wherein R_1 is a straight or branched, saturated or unsaturated aliphatic radical containing from about 7 to about 20, preferably from about 8 to 18, most preferably 10 to 14 carbon atoms; R_2 and R_3 are each, independently, hydrogen, lower alkyl, or hydroxy (lower alkyl) of 1 to 4 carbon atoms, preferably methyl or ethyl, most preferably ethyl; and R_4 is a divalent C_1-C_4-alkylene, preferably methylene or ethylene, especially preferably ethylene. Particularly preferred among these amphoterics are cocoamidopropylbetaines.

Mixtures of any of the amphoteric detergents with one another and with amine oxide detergents may also be used.

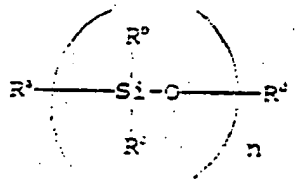
Other classes of amphoteric detergents such as the sarcosines, taurines, isethionates and the like, can also be used.

The amphoteric detergent is used in an amount such that the molar ratio of amphoteric detergent to high-foaming anionic detergent is from about 2:1 to about 1:2, more preferably from about 1.5:1 to about 1:1.5.

The mixture of high-foaming anionic detergent and amphoteric detergent is used in a major amount, based on the total weight of the composition, i.e., greater than 50% by weight based on the total composition, preferably greater than about 60% by

weight, based on the total composition, for example from about 50 or 60% up to about 75% or more, such as 80%, 85% or 90% or more.

Suitable water-insoluble silicones for use in the present invention include the polydihydrocarbylsiloxanes of the formula



wherein R^1, R^2, R^3 and R^4 each independently represent a hydrocarbyl group and n is the degree of polymerization. Preferably, R^2 and R^3 represent alkyl or aromatic groups; more preferably, R^2 and R^3 represent lower alkyl groups (i.e., of 1-4 carbon atoms); and, most preferably, R^2 and R^3 both represent methyl. R^1 and R^4 are preferably lower alkyl, and most preferably methyl. The degree of polymerization, n, is such that the polymer has a viscosity of about 1,000 to about 120,000 cP, at room temperature; preferably, 10,000 to 100,000 cP.

The water-insoluble silicone is used in an amount, based on the total composition, of more than 0 but less than about 10% by weight; preferably 0.05-6% by weight; most preferably 2-4% by weight.

The solid synthetic detergent composition may further include one or more mild anionic detergents such as the alkali metal, magnesium or ammonium C_{10}-C_{18}-acyl isethionates, especially cocoyl isethionates.

Examples of such mild anionic surfactants include, for example, the alkali metal, magnesium or ammonium salts of the following:

C_{12}-C_{16} hydroxyalkane sulfonates (wherein the hydroxyl group is removed at least 1 carbon atom from the sulfonate group),

C_{10}-C_{16} acyl isethionates,

C_{10}-C_{16} alkylmethyl taurides,

C_{12}-C_{16} hydroxyalkylmethyl tauride,

C_{12}-C_{18} primary alkyl phosphonates and phosphates,

C_{12}-C_{18} mono-alkyl succinates and maleates,

C_4-C_{12} mono- or dialkylsulfosuccinates (especially moncalkyl), and

C_4-C_{18} alkyl ethoxylated sulfates and sulfonates (with 4 or more ethoxyl groups per molecule).

Other mild anionic surfactants include, for example, alkyl glycerol ether sulfates, alkyl polysaccharides, such as C_4-C_{12} alkyl poly glucosides (G_1 to G_3), and the like. Any of the mild surfactants disclosed, for example, in U.S. Patent 4,673,525, Leonard E. Small, et al., the disclosure of which is incorporated herein by reference thereto, may be used in the soap composition products of this invention.

In addition, it is also within the scope of the invention to include small amounts of normally solid nonionic surfactants, to the extent that they do not interfere with soap bar formation and properties. Such additional anionic detergents, when present, may

be used in an amount of up to about 25% by weight, such as from about 1 to 22% by weight, especially from about 5 to 20% by weight, based on the total composition.

The solid synthetic detergent composition may also, optionally, contain a hydrotrope, such as sodium cumene sulfonate, sodium xylene sulfonate, and the like, in an amount of up to about 10% by weight, based on the total composition.

The solid soap composition of the present invention may also contain a variety of other conventional optional ingredients suitable for rendering such compositions more acceptable to the consumer. Such conventional optional ingredients are well-known to those of ordinary skill in the art and include, e.g., pearlescent aids such as ethyleneglycol distearate; preservatives such as benzyl alcohol, ethyl paraben, propyl paraben and imidazolidinyl urea; thickeners and viscosity modifiers such as a diethanolamide of a long chain fatty acid, cocomonoethanolamide, guar gum, methyl cellulose, starch derivatives, fatty alcohols, sodium chloride, sodium sulfate, polyvinyl alcohol and ethyl alcohol; pH adjusting agents such as citric acid, sodium citrate, succinic acid, phosphoric acid, sodium hydroxide, sodium carbonate, etc.; coloring agents such as any of the F, D & C and/or D & C dyes; perfumes; sequestering agents such as tetrasodium ethylenediamine tetraacetate; and polymer plasticizing agents such as glycerin and propylglycol.

Such conventional optional ingredients are generally used individually at a level of from about 0.01 to 10% by weight, based

on the total composition, preferably, from about 0.05 to 5% by weight. In the aggregate, the total amount of such optional ingredients should not exceed about 10% by weight, based on the total composition.

The solid synthetic detergent composition of the present invention may be formulated by adding water-insoluble silicone to other solid components; then mixing and distributing the silicone throughout the composition by the normal soap mixing process of amalgamation, plodding, etc.; and then pressing the solid synthetic detergent composition into a desired shape, e.g., a bar.

Examples

The compositions set forth in the following Table are prepared in the manner set forth above.

TABLE

INGREDIENT	A	B
	% by wt.*	
Sodium lauryl sulfate	33	29
Betaine L-7 (cocoamidopropylbetaine)	25	29
Igepon AC-78 (sodium cocoylisethionate)	20	20
Sodium cumene sulfonate	10	10
Dimethicone (polydimethylsiloxane, 60,000 cP)	5	5
Sodium chloride	6.5	6.5
Perfume (Fancy MI)	0.5	0.5

* as active ingredient

These formulations are rated as mild as conventional, commercially-available mildness soap bars. Similar results are expected if the sodium lauryl sulfate is replaced by, for example, sodium coco sulfate, ammonium lauryl sulfate, sodium dodecyl

benzene sulfonate, sodium dodecene sulfonate, sodium eicosyl sulfonate, or ammonium tridecyl benzene sulfonate.

Similar results are expected by replacing the betaine with, for example, 1-coco-5-hydroxyethyl-5-carboxyethyl imidazoline, dimethyl-dimyristylbetaine,N-cocoanudopropyl-N,N-dimethyl'-N-carboxymethyl ammonium betaine, cocoanudopropyl sultaine, coco betaine or stearyldimethylbetaine.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

1. A solid synthetic detergent composition for cleaning and conditioning hair and skin to provide softer, smoother hair and skin comprising

(A) a major amount of a mixture of (1) a high-foaming anionic detergent selected from the group consisting of higher alkyl sulfates, higher alkyl sulfonates and higher alkyl mononuclear aromatic sulfonates and (2) an amphoteric detergent; and

(B) a minor amount of less than about 10% by weight, based on the total composition, of a water-insoluble silicone having a viscosity of from about 1,000 to about 120,000 cP;

wherein the molar ratio of amphoteric detergent to high-foaming anionic detergent is from about 2:1 to about 1:2.

2. The solid synthetic detergent composition according to claim 1, wherein said water-insoluble silicone is present in an amount of about 1 to about 6% by weight.

3. The solid synthetic detergent composition according to claim 1, wherein said water-insoluble silicone is present in an amount of about 2 to about 4% by weight.

4. The solid synthetic detergent composition according to claim 1, wherein said water-insoluble silicone has a viscosity of from about 10,000 to about 100,000 cP.

5. The solid synthetic detergent composition according to claim 1, wherein said water-insoluble silicone is a polydihydrocarbylsiloxane.

6. The solid synthetic detergent composition according to claim 5, wherein said polydihydrocarbylsiloxane is polydimethylsiloxane.

7. The solid synthetic detergent composition according to claim 1, wherein said high-foaming anionic detergent is a higher alkyl sulfate.

8. The solid synthetic detergent composition according to claim 7, wherein said higher alkyl sulfate is a C_{12-22} alkyl sulfate.

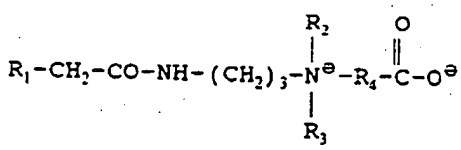
9. The solid synthetic detergent composition according to claim 8, wherein said C_{12-22} alkyl sulfate is sodium lauryl sulfate.

10. The solid synthetic detergent composition according to claim 1, wherein said high-foaming anionic detergent is a higher alkyl mononuclear aromatic sulfonate.

11. The solid synthetic detergent composition according to claim 10, wherein said higher alkyl mononuclear aromatic sulfonate is a higher alkyl benzene sulfonate.

12. The solid synthetic detergent composition according to claim 1, wherein said high-foaming anionic detergent is a higher alkyl sulfonate.

13. The solid synthetic detergent composition according to claim 1, wherein said amphoteric detergent is an amidobetaine of the formula



wherein R_1 is a straight or branched, saturated or unsaturated aliphatic radical of about 7 to about 20 carbon atoms; R_2 and R_3 are each, independently, hydrogen, C_{1-4} alkyl or C_1-C_4 hydroxyalkyl; and R_4 is a divalent C_{1-4} alkyl.

14. The solid synthetic detergent composition according to claim 13, wherein said betaine is a cocoamidopropylbetaine.

15. The solid synthetic detergent composition according to claim 1, further comprising about 20% by weight, based on the total composition, of an alkali metal, magnesium or ammonium salt of a C_{10-18} acyl isethionate.

16. The solid synthetic detergent composition according to claim 15, wherein said composition contains about 20% by weight of the sodium salt of cocoyl isethionate.

17. The solid synthetic detergent composition according to claim 1, further comprising about 10% by weight, based on the total composition of a hydrotrope.

18. The solid synthetic detergent composition according to claim 17, wherein said hydrotrope is sodium cumene sulfonate.

19. The solid synthetic detergent composition according to claim 1, in the form of a bar.

DATED THIS 8 DAY OF JULY 1993

COLGATE-PALMOLIVE COMPANY

Patent Attorneys for the

Applicant:-

F.B.RICE & CO.

Abstract

A solid synthetic detergent composition for cleaning and conditioning hair and skin to provide softer, smoother hair and skin comprises: a major amount of a mixture of (1) a high-foaming anionic detergent selected from the group consisting of higher alkyl sulfates, higher alkyl sulfonates and higher alkyl mononuclear aromatic sulfonates and (2) an amphoteric detergent; and less than about 10% by weight, based on the total composition, of a water-insoluble silicone having a viscosity of from about 40,000 to about 120,000 cP; wherein the weight ratio of amphoteric detergent to high-foaming anionic detergent is from about 0.75 to about 1.0.